

FORM PTO-1390  
(REV. 2-2005)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICEATTORNEY'S DOCKET NUMBER  
9301-210-999**TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A SUBMISSION UNDER 35 U.S.C. 371**

U.S. APPLICATION NO. (if known, see 37CFR 1.5)

**10/540405**INTERNATIONAL APPLICATION NO.  
PCT/US2003/041613INTERNATIONAL FILING DATE  
December 24, 2003PRIORITY DATE CLAIMED  
December 27, 2002

## TITLE OF INVENTION

Computer Systems and Methods for Associating Genes with Traits Using Cross Species Data

## APPLICANT(S) FOR DO/EO/US

Eric E. Schadt and Stephanie A. Monks

Applicant herewith submits to the United States Designated/ Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.
4. ☒ The U.S. has been elected (Article 31).
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ has been communicated by the International Bureau.
  - c. ☒ is not required, as the application was filed in the United States Receiving Office (RO/US)
6. ☐ An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).
  - a. ☐ is attached hereto.
  - b. ☐ has been previously submitted under 35 U.S.C. 154(d)(4).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are attached hereto (required only if not communicated by the International Bureau).
  - b. ☐ have been communicated by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) - Unexecuted (35 U.S.C. 371(c)(4)).
10. ☐ An English language translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

**Items 11. to 20. below concern document(s) or information included:**

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A preliminary amendment.
14. ☐ An Application Data Sheet under 37 CFR 1.76.
15. ☐ A substitute specification.
16. ☐ A power of attorney and/or change of address letter.
17. ☐ A computer-readable form of the sequence listing in accordance with PCT Rule 13ter 2 and 37 CFR 1.821- 1.825.
18. ☐ A second copy of the published International Application under 35 U.S.C. 154(d)(4).
19. ☐ A second copy of the English language translation of the International Application under 35 U.S.C. 154(d)(4).
20. ☒ Other items or information: International Publication No. WO 2004/061616 A2 dated July 22, 2004 (of PCT/US2003/041613)

US APPLICATION NO. (If known, see 37 CFR 1.51) <b>10/540405</b>		INTERNATIONAL APPLICATION NO. PCT/US2003/041613		ATTORNEY'S DOCKET NUMBER 9301-210-999				
21. The following fees are submitted: <b>BASIC NATIONAL FEE:</b> <input checked="" type="checkbox"/> a) Basic national fee ..... <b>\$300.00</b> <input checked="" type="checkbox"/> b) Examination fee ..... Was the International Preliminary Examination Report prepared by the USPTO and do all filed claims in this U.S. application satisfy provisions of PCT Article 33(1)-(4) (i.e., novelty, inventive step and industrial capability)? ..... <input type="checkbox"/> i) Yes (\$100.00) ..... <b>\$200.00</b> <input checked="" type="checkbox"/> ii) No (\$200.00) ..... <input checked="" type="checkbox"/> c) Search fee ..... Was the USPTO the International Searching Authority? ..... <input checked="" type="checkbox"/> i) Yes (\$100.00) ..... ii) If no: <input type="checkbox"/> (a) An International Search Report will be provided to the USPTO on or before payment of the search fee. (\$400.00) ..... <b>\$100.00</b> <input type="checkbox"/> (b) No International Search Report will be provided to the USPTO. (\$500.00) ..... <div style="text-align: right;"><b>TOTAL OF CALCULATIONS =</b></div>						\$	\$600.00	
<input checked="" type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing of computer programs listing filed in electronic medium). The fee is <b>\$250</b> for each additional 50 sheets of paper or fraction thereof.								
Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof (round up to a whole number).	RATE					
436 -100	336 /50	7	x 250.00		\$1750.00			
Surcharge of \$130.00 for furnishing the oath or declaration later than 30 months from the earliest claimed priority date (37 CFR 1.492 (e)).				\$	\$130.00			
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE X					
Total Claims	20 - 20	0	x \$50.00		\$0.00			
Independent Claims	3 - 3	0	x \$200.00	=	\$0.00			
<input type="checkbox"/> MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ 360.00		\$0.00			
<b>TOTAL OF ABOVE CALCULATIONS=</b>				=	\$ 2480.00			
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 50%				- \$	\$0.00			
<b>SUBTOTAL =</b>				\$	\$2480.00			
Surcharge of <b>\$130.00</b> for furnishing the English Translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(f)).					\$0.00			
<b>TOTAL NATIONAL FEE</b>				=	\$ 2480.00			
Fee for recording the enclosed assignment (37 CFR 1.21 (h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). 0 x \$40.00 per property				\$	\$0.00			
<b>TOTAL FEES ENCLOSED</b>				=	\$ 2480.00			
				<b>Amount to be refunded:</b>				
				<b>charged:</b>	2480.00			
a. <input type="checkbox"/> A check in the amount of \$                      to cover the above fees is enclosed. b. <input checked="" type="checkbox"/> This is an estimate of the fees due. Please charge Deposit Account No. 50-3013 to cover the required fees. A copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 50-3013. A copy of this sheet is enclosed. <b>Note: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137 (a) or (b)) must be          filed and granted to restore the International Application to pending status.</b> 22. <input type="checkbox"/> Other instructions								
23. <input checked="" type="checkbox"/> All correspondence for this application should be mailed to                      JONES DAY                      20583 24. <input checked="" type="checkbox"/> All telephone inquiries should be made to Adriane M. Antler at 212-326-3939.								
Adriane M. Antler		<i>Brett Jones Reg No 42,813</i> for Adriane Antler		32,605 REG. NO.	June 22, 2005 DATE			